

REMARKS

This communication is in response to the Office Action mailed on August 23, 2007. In the Office Action, claims 12-16 were rejected under 35 U.S.C. 101 because the claimed subject matter was considered as non-statutory subject matter, citing that a computer-readable medium included carrier waves. With this amendment, claims 12-16 have been amended to recite a "computer-readable storage medium." The Specification at least at page 7, line 14 - page 8, line 18 explains how such media is of a tangible, physical form. In view of these amendments, which were not made in view of any prior art, Applicants respectfully request withdrawal of the rejection.

It should also be noted that claim 1 has been amended in order to recite "embodying the language model in a tangible form," which is believed preferred in U.S. practice. Like the foregoing mentioned amendments, the amendment to claim 1 was also not made in view of any prior art.

The Office Action next reports that claims 1-16 were rejected as being anticipated by Crespo et al. entitled "Language Model Adaptation For Conversational Speech Recognition Using Automatically Tagged Pseudo-Morphological Classes." Applicants respectfully traverse this rejection. Claim 1 recites a method of adapting an n-gram language model for a new domain. The method includes, in part, receiving background data indicative of general text phrases not directed to the new domain; receiving a set of semantic entities used in the new domain and organized in classes; generating background n-gram class count data based on the background data and the semantic entities and classes thereof; and training a language model based on the background n-gram class count data. Although Crespo et al. also use background data from a large text database not directed to the new domain, the manner in which this data is processed is not

taught, suggested or obvious in view of the description of Crespo et al.

Referring to Fig. 2 of the cited article and the accompanying description in Section 3, Crespo et al. clearly obtain the final word-bigram language model (LM) from interpolation of a back-off word-bigram language model obtained from the "left" branch of Fig. 2 and a word-bigram language model obtained from the "right" branch. It is important to realize that the "left" branch pertains to processing the background data indicative of general text phrases that are not directed to the new domain, while the right branch is used to process task-dependent sentences, i.e. sentences of the domain. Furthermore, it is only the right branch (i.e. domain processing) that uses "classes." The left branch (i.e. background, non-domain processing) does not use class data or semantic entity data.

As indicated above, claim 1 clearly recites "generating background n-gram class count data based on the background data and the semantic entities and classes thereof; and training a language model based on the background n-gram class count data." It is respectfully submitted that Crespo et al. does not "generate background n-gram class count data", because the left branch does not generate "class count data" and certainly does not do so using semantic entities and classes. Use of semantic entities and class data is simply not present in the left branch. Since Crespo et al. do not generate the requisite data, and in the manner recited by claim 1, they also do not teach, suggest or render obvious, the idea of "training a language model based on the background n-gram class count data." Accordingly, Applicants respectfully request that the rejection of claim 1 be withdrawn and the claim be allowed.

Claim 12 includes similar background data processing as that described above with respect to claim 1. Thus, for the

reasons stated above, Applicants also request that the rejection of claim 12 be withdrawn and the claim be allowed.

Dependent claims 2-11 and 13-16 recite further features that when combined with the features recited by their corresponding independent claim, and any intervening claims, are believed to be separately patentable.

The foregoing remarks are intended to assist the Office in examining the application and in the course of explanation may employ shortened or more specific or variant descriptions of some of the claim language. Such descriptions are not intended to limit the scope of the claims; the actual claim language should be considered in each case. Furthermore, the remarks are not to be considered exhaustive of the facets of the invention which are rendered patentable, being only examples of certain advantageous features and differences, which applicant's attorney chooses to mention at this time. For the foregoing reasons, applicant reserves the right to submit additional evidence showing the distinction between applicant's invention to be unobvious in view of the prior art.

Furthermore, in commenting on the references and in order to facilitate a better understanding of the differences that are expressed in the claims, certain details of distinction between the same and the present invention have been mentioned, even though such differences do not appear in all of the claims. It is not intended by mentioning any such unclaimed distinctions to create any implied limitations in the claims.

For the foregoing reasons, Applicant submits that the present application is in allowable form. Allowance of the present application is respectfully requested.

An extension of time is hereby requested for responding to the Office Action. An online charge authorization for the extension of time fee is included herewith.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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